



# UNITED STATES PATENT AND TRADEMARK OFFICE

rr  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,013	07/30/2003	Manabu Kai	FUSA 20.530	8513
7590	06/21/2004		EXAMINER	
Katten Muchin Zavis Rosenman 575 Madison Avenue New York, NY 10022-2585				LEE, BENNY T
		ART UNIT	PAPER NUMBER	2817

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

FILING DATE

10 630 013

10/06/2004

SEARCHED  
INDEXED  
MAILED

ART 371  A. 371 PAPER

DATE MAILED

THE EXAMINER IS CHARGE OF THIS APPLICATION  
U.S. PATENT AND TRADEMARK OFFICE

This application has been examined  Responsive to communication filed on 9 March 2004  This action is made final.

A shortened statutory period for response to this action is set to expire May 10 (3) month(s), Days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1.  Notice of References Cited by Examiner, PTO-892.
2.  Notice re Patent Drawing, PTO-948.
3.  Notice of Art Cited by Applicant, PTO-1449.
4.  Notice of Informal Patent Application, Form PTO-152
5.  Information on How to Effect Drawing Changes, PTO-1474.
6. \_\_\_\_\_

Part II SUMMARY OF ACTION

1.  Claims 1-13 are pending in the application.

Of the above, claims 2-5; 8-10; 12; 13 are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims \_\_\_\_\_ are allowed.

4.  Claims 1, 6, 7, 11 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims 1-13 are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable;  not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner;  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved;  disapproved (see explanation).

12.  Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other \_\_\_\_\_

EXAMINER'S ACTION

SN 630013

U.S.GPO:1990-259-282

Applicant's election of species III, claims 6, 7, 10, 11 in the Paper of 8 March 2004 of is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

However, a review of the claims corresponding to the elected species indicates that independent and generic claims 1 (from which claim 6 directly depends) also belongs in the elected species. Also dependent claim 10 does not pertain to the dual pilot signals of the elected species and hence is withdrawn.

Claims 2-5; 8-10; 12; 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the Paper of 8 March 2004.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: At all occurrences throughout the specification, note that "owing" should be rewritten as – due – (e.g. p. 6, l. 24; p. 13, ls 41, 44; p. 14, ls 26, 31; p. 15, l. 2; p. 16, l. 45). At all occurrences note that "pass characteristic" should be rephrased as --pass band characteristic--. Page 16, lines 20, 22, note that -- % -- should follow "10" and "90" respectively. Page 17, line 42, note that --:-- should follow "51".

The disclosure is objected to because of the following informalities: Page 1, line 33, note that it is unclear which "characteristics" are "stabilize". Page 2, lines 5, 15, note that – 19 – should precede "(B)" and "(A)", respectively, lines 6, 8, note that – [see fig. 19(A)] – should follow "1b" and "1c", respectively for clarity of description; line 16, note that – [see fig. 19 (B)] – should follow "1H" for clarity; line 31, note that – 21 – should precede "(B)". Pages 6, 7, note that the brief description of figure (2, 9, 10, 14, 19, 21) should be respectively rewritten to include the drawing labeling as provided in the drawing figures (e.g. "Fig. 3" should be – Figs. 3(a) 3(b), 3(c) --, etc). Page 8, line 33, note that – (BPF) – should follow "filter" for consistency of description. Page 10, line 10, note that – as shown in Fig. 1 – should follow "ALM" for clarity of description. Page 11, line 27, note that –  $t_1$ ,  $t_2$ ,  $t_3$ ,  $t_4$  – should follow "intervals" for clarity of description. Page 12, lines 22, 23, note that "loss from a head of the low noise amplifier 12" is vague in meaning and needs clarification; line 37, note that "latter" should be rephrased as – receive antenna 32 – for clarity of description. Page 13, line 12, note that it is unclear whether "in reverse from the antenna" is a correct characterization. Page 16, lines 1, 6, 40 and page 17, lines 2, 5, 8, should "pilot signal amplifier" correctly be – pilot signal detector – at each occurrence? Page 16, line 30, note that – as shown in fig. 14(A) – should follow "12" for clarity of description; line 38, note that "ratio of 5:5" is vague in meaning and needs clarification. Appropriate correction is required

The disclosure is objected to because of the following informalities: Note that in the description of the following drawing figures, the cited reference labels need explicit description therewith: Figs. 3(B) 3(C) all labels therein; fig. 9(A) 9(B) 9(C), 9(D), "T=To"

Art Unit: 2817

and S21; fig. 9(A), "T=T<sub>2</sub>" and "T=T<sub>1</sub>"; Fig. 9(B), "f<sub>c1</sub>" and "f<sub>c2</sub>"; fig. 10, (Sf<sub>c</sub>, Sf<sub>c2</sub>); figs. 12, 14(b), 16, all labeled features therein; fig. 13, [S21 (T=70K); S21 (T=300k)]; fig. 19(B), "1e". Appropriate correction is required.

The drawings are objected to because of the following In fig. 1 note that – (ALM) – should follow "ALARM SIGNAL" for consistency with the specification description In fig. 11, should "SF<sub>c</sub>" correctly be – SF<sub>L</sub> --?; In fig. 15, for the "pilot signal detector block 43", note that – f<sub>L</sub> – should be added thereto; In figs. 18, 19(A), 19(B), 20, 21(A), 21(B), note that it appears that these drawing figures should be designated as – PRIOR ART -- ; In figs. 19(A), 19(B), note that reference label – 1— needs to be added; In fig. 20, note that reference label – 5— needs to be added. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claims 6, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 6, 11, note that it is unclear how "an abnormality" as recited in these claims relate to the "abnormality" as recited in the corresponding independent claim (i.e. the same, as different from etc). Clarification is needed.

The following claims has been found objectionable for reasons set forth below:

In claims 6, 11, second line in each claim, should "waves" properly be – waveforms – for consistency with the subsequent description thereof in each claim?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Patent Abstract of Japan ('269, cited by applicant).

The Japanese patent abstract discloses a receiving system comprising a super conducting filter (e.g. 4), within a refrigeration unit (10, 11) and whose output is coupled to an amplifier (5). A pilot signal generating means (21) provides a pilot signal, which is in the attenuation band of the super-conducting filter (4). As described at paragraph (0023) the pilot signal frequency introduced is reflected by the first filter (4) by virtue of the frequency being in the attenuation band of filter (4). Moreover, the pilot signal is "appended" to the received signal and the composite signal is detected by level detecting means (26) and monitored by control means (28). Note that when the detected level is lower than a preset threshold value, then a fault in the system has occurred and a warning or alarm of a fault is issued.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wright et al discloses a system with dual pilot signals. Farmer et al also pertains a dual pilot signal system.

Any inquiry concerning this communication should be directed to Benny T Lee at telephone number (571) 272-1764.

  
BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817